

FINAL REPORT – October 29, 2002

OFFICE OF THE INDIANA COMMISSIONER OF AGRICULTURE, VALUE ADDED GRANT PROGRAM Grant No. VA00-276-402

ADDING VALUE TO THE FARM MILK SUPPLY – CAPTURING MILK QUALITY PREMIUMS – Simon J. Kenyon and Michael M. Schutz

Summary of Project Objectives

The goal of this project was to enable targeted dairy herds which are new, expanding or starting milk quality testing, to ensure capture of milk quality premiums and avoidance of penalties. This was accomplished through establishment of a milk quality management team and a structured evaluation of the milking operation. A farm meeting at which goals, standard operating procedures, milker training and modifications to the milking operation were discussed and planned followed the evaluation. An essential component of the project was to recruit participating farms into educational and promotional activities to extend the growth of milk quality programming to other farms. The program has the potential to be a model for cooperation between the agencies, businesses and farm personnel who form the support for dairy operations producing a premium quality product.

Grant Extension

The Office of the Indiana Commissioner of Agriculture granted a one-year extension to this grant. This was requested because the Principal Investigator became heavily involved in response to biosecurity issues raised by the Foot and Mouth Disease outbreak in Europe starting in February 2001, and was on sabbatical leave working on biosecurity issues from July 1, 2001 to December 31, 2001. Continuing commitment to biosecurity and agroterrorism issues has limited the accomplishments and data analysis accomplished under this grant.

On-farm consultation

The major activity supported by the grant was farm consultations to improve milk quality. The grant supported on farm investigations of milk quality problems, and farm follow-up meetings. These meetings utilized a team approach to implement management changes, which would result in improved milk quality.

The team examined herd records, took a history of the problem, inspected the cow housing and milking facilities, attended a herd milking, took samples for bacteriological examination, analyzed milking technique and in some cases tested milking equipment. In most cases we were able to determine the factors, which led to high somatic cell counts, although in some cases these were not apparent. Success in reducing somatic cell counts depended on a number of factors, the most important of which was prioritization of milk quality as a major issue by the producer. Much more success was achieved with producers with already moderate milk quality that they wished to improve, rather than

with producers who had poor milk quality to begin with and were at risk of losing their Grade A permit.

One of the initial three herds we worked with captured milk quality premiums in March 2001 for the first time in over two years. Altogether herd consultations were carried out with 20 herds during the period of the grant funding.

As a result of this project we now have a cadre of producers to call on for promotional and educational activities. Two of these participated in a producer panel at the 2002 Indiana Milk Quality Conference.

EDUCATIONAL PROGRAMS

As outlined in the Project Objectives, increasing the capacity of both producers and dairy support personnel to work together to improve milk quality is a key objective.

In collaboration with the Indiana Board of Animal Health, Dairy Cooperatives, the Cooperative Extension Service and the Indiana State Dairy Association, a number of training programs have been presented. These have focused on producers and industry personnel. Several of the institutions have acted as coordinators for these programs and provided financial support for them.

Programs included:

Purdue University Dairy Road Show meetings at eight sites around the state in February and March 2001 and a further four sites in 2002.

Milk Quality Schools delivered at four on-farm sites and drawing over 200 producers and employees. Jointly sponsored by Purdue University, Indiana Board of Animal Health, Dairy Cooperatives and Milking Equipment Suppliers. The Board of Animal Health distributed Milk and Dairy Beef Residue Avoidance Program manuals to participants at these sessions. The programs were given in English and Spanish and bound copies of the training materials were given to participants.

Milk Quality Training Session, for Indiana Board of Animal Health Dairy Farm Inspectors and Dairy Cooperative Field Representatives.

Indiana Milk Quality Conferences. The project supported participation of the Purdue faculty in the Conference Planning Committee. Presentations at the conferences by project investigators included: “Teamwork,” (2001), “Why Illegal Drugs Are Illegal” (2002), and research updates and dairy outlook presentations in both years.

TRAINING MATERIALS

“Milking for Quality” web based training”. This web based dairy farm employee training certificate program has been developed by project investigators and is in the final stages of review before release as a certificate program, managed by Purdue University.

Milkers School Manuals. We developed a spiral bound manual for the Indiana Milk Quality Schools, which includes materials in both English and Spanish in order to reach all sectors of Indiana’s dairy work force.

“Best Milking Practices” This is a summary of milking techniques produced as an extension publication.

Publication: Health and Production Problems Associated with Dairy Herd Expansion Al-Rawashdeh OF, Kenyon SJ, Gumaa AY, Nour AYM. *Compendium for Continuing Veterinary Education*, August 2002.